

ROBOTIC SEED-PLANTING APPARATUS AND METHODS

ABSTRACT

Robotic apparatus for removing seeds contained in covered or uncovered containers and planting the seeds into selected planting chambers are disclosed. An exemplary apparatus

5 includes a first vacuum-activated probe configured to pick up an entire seed population from a donor container. A seed-alignment trough is provided to receive the seed population from the first probe. The seed-alignment trough is configured such that seeds deposited in the trough become aligned or otherwise arranged. A second vacuum-activated probe is configured to

10 successively remove individual seeds from the seed-alignment trough and to plant each removed seed in a selected planting chamber. Also disclosed are automated methods for transferring and planting seeds.